

P.O. Box 4030
2900 Irvin Cobb Drive
Paducah, KY 42002-4030
270.442.7321 Main
270.442.5337 Main Fax



Fax

| | |
|------------------------------------|------------------------------|
| To: Director of Engineering | From: Craig Gerke |
| Fax: 502-564-3460 | Fax: 270-441-0866 |
| Phone: | Date: April 2, 2012 |
| Re: 2011 Annual Reliability Report | Pages: 5 including the cover |

Urgent
 For Review
 Please Comment
 Please Reply
 Please Recycle

Please find attached our 2011 Annual Reliability Report.

If I can be of further assistance, please contact me at 270-441-0842.

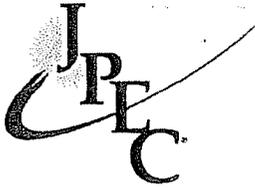
Thank you,

Craig Gerke
Interim VP of Engineering and Operations

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APR 03 2012

PUBLIC SERVICE
COMMISSION



Jackson Purchase Energy
P.O. Box 4030 • 2900 Irvin Cobb Drive
Paducah, KY 42002-4030
270.442.7321 • 800.633.4044

Your Cooperative Partner by Choice
Online at JPEnergy.com

April 2, 2012

Director of Engineering
Kentucky Public Service Commission
211 Sower Blvd.
PO Box 615
Frankfort, KY 40602-0615

RE: Jackson Purchase Energy Corporation: 2011 Annual Reliability Report
Administrative Case No. 2006-00494

To Whom It May Concern:

Jackson Purchase Energy Corporation respectfully submits the 2011 Annual Reliability Report per the order dated October 26, 2007 in Administrative Case No. 2006-00494.

Please let me know if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Craig Gerke', with a horizontal line extending to the right.

Craig Gerke
Interim Vice President of Engineering



KENTUCKY PUBLIC SERVICE COMMISSION

Electric Distribution Utility Annual Reliability Report

SECTION 1: CONTACT INFORMATION

| | | |
|----------------------------|-----|-------------------------------------|
| UTILITY NAME | 1.1 | Jackson Purchase Energy Corporation |
| REPORT PREPARED BY | 1.2 | Craig Gerke |
| E-MAIL ADDRESS OF PREPARER | 1.3 | craig.gerke@jpenenergy.com |
| PHONE NUMBER OF PREPARER | 1.4 | 270-442-7321 |

SECTION 2: REPORT YEAR

| | | |
|-------------------------|-----|------|
| CALENDAR YEAR OF REPORT | 2.1 | 2011 |
|-------------------------|-----|------|

SECTION 3: MAJOR EVENT DAYS

| | | |
|-----------------------------------|-----|-------------|
| TMED | 3.1 | 19.37984803 |
| FIRST DATE USED TO DETERMINE TMED | 3.2 | 1/1/2006 |
| LAST DATE USED TO DETERMINE TMED | 3.3 | 12/31/2010 |
| NUMBER OF MED IN REPORT YEAR | 3.4 | 1 |

NOTE: Per IEEE 1366 TMED should be calculated using the daily SAIDI values for the five prior years. If five years of data are not available, then utilities should use what is available until five years are accumulated.

SECTION 4: SYSTEM RELIABILITY RESULTS

Excluding MED

| | | |
|-------|-----|---------|
| SAIDI | 4.1 | 181.03 |
| SAIFI | 4.2 | 1.775 |
| CAIDI | 4.3 | 101.977 |

Including MED (Optional)

| | | |
|-------|-----|---------|
| SAIDI | 4.4 | 257.650 |
| SAIFI | 4.5 | 2.020 |
| CAIDI | 4.6 | 127.850 |

Notes:

- 1) All duration indices (SAIDI, CAIDI) are to be reported in units of minutes.
- 2) Reports are due on the first business day of April of each year
- 3) Reports cover the calendar year ending in the December before the reports are due.
- 4) IEEE 1366 (latest version) is used to define SAIDI, SAIFI, CAIDI, and TMED

KENTUCKY PUBLIC SERVICE COMMISSION

SECTION 5: OUTAGE CAUSE CATEGORIES Excluding MED

| CAUSE CODE DESCRIPTION | SAIDI VALUE | CAUSE CODE DESCRIPTION | SAIFI VALUE |
|------------------------------|----------------|------------------------------|----------------|
| Storms (Non ME Days) 5.1.1 | 66.29625 | Storms (Non ME Days) 5.2.1 | 0.441393 |
| Line Equipment 5.1.2 | 40.19351 | Line Equipment 5.2.2 | 0.431252 |
| ROW 5.1.3 | 17.98433 | Substation 5.2.3 | 0.178181 |
| Substation 5.1.4 | 12.76072 | ROW 5.2.4 | 0.140941 |
| Cut Out - Line or XFMR 5.1.5 | 8.241789 | Cut Out - Line or XFMR 5.2.5 | 0.111445 |
| Lightning 5.1.6 | 7.53088 | Animal 5.2.6 | 0.108601 |
| Public 5.1.7 | 6.428666 | Public 5.2.7 | 0.092602 |
| Animal 5.1.8 | 5.011371 | Lightning 5.2.8 | 0.069443 |
| Wire Primary 5.1.9 | 4.475595 | Planned 5.2.9 | 0.060673 |
| OCR / Breaker 5.1.10 | 1.959135 | Wire Primary 5.2.10 | 0.030799 |

SECTION 6: WORST PERFORMING CIRCUITS

| CIRCUIT IDENTIFIER | SAIDI VALUE | MAJOR OUTAGE CATEGORY |
|--------------------|-----------------|-----------------------|
| 4705 | 6.1.1 1014.178 | Storms |
| 4701 | 6.1.2 981.7876 | Storms |
| 3201 | 6.1.3 743.9869 | Line Equipment |
| 4004 | 6.1.4 719.9869 | Storms |
| 505 | 6.1.5 637.1729 | Lightning |
| 3901 | 6.1.6 586.0229 | Storms |
| 4302 | 6.1.7 582.5928 | Storms |
| 4903 | 6.1.8 560.3454 | Storms |
| 4703 | 6.1.9 521.8356 | Storms |
| 5001 | 6.1.10 519.4277 | Storms |

| CIRCUIT IDENTIFIER | SAIFI VALUE | MAJOR OUTAGE CATEGORY |
|--------------------|-----------------|-----------------------|
| 3901 | 6.2.1 5.885496 | Storms |
| 7705 | 6.2.2 5.511364 | Line Equipment |
| 505 | 6.2.3 5.471186 | Lightning |
| 3201 | 6.2.4 5.219895 | Line Equipment |
| 3104 | 6.2.5 4.753507 | Storms |
| 4705 | 6.2.6 4.251462 | Storms |
| 4204 | 6.2.7 4.239533 | Storms |
| 4703 | 6.2.8 3.933333 | Storms |
| 4701 | 6.2.9 3.694981 | Storms |
| 3102 | 6.2.10 3.675079 | Storms |

Electric Distribution Utility Annual Reliability Report

Additional pages may be attached as necessary

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SECTION 7: VEGETATION MANAGEMENT PLAN REVIEW

JPEC is satisfied that its current VMP is being implemented properly. Since we have adopted our current four year rotation and become vigilant in our spraying efforts, our right-of-way related outages have remained low when compared to pervious years. No changes will be implemented to the plan in the coming year.

SECTION 8: UTILITY COMMENTS